To report a blue-green algae bloom call your local health department.

For additional help or information call:

F. Joan Hardy, PhD.
Washington State Department of Health
Office of Environmental Health Assessments
360-236-3173 or toll free 1-877-485-7316

Mike Crayton, PhD.
Pacific Lutheran University
Biology Department
253-535-7547

Jean Jacoby, PhD.
Seattle University
Department of Civil and
Environmental Engineering
206-296-5526

For information on preventive measures and other ideas for protecting lakes contact:

Allan Moore
Washington State Department of Ecology
Water Quality Financial Assistance Program
360-407-6563

Washington State Department of Health
DOH Pub 333-006 6/2000

WASHINGTON STATE DEPARTMENT OF ECOLOGY

This brochure was produced in part through a grant from the Centennial Clean Water Fund.

If you . . .

- are a lake resident
- enjoy lake activities such as swimming, fishing, boating
- graze your livestock near a lake or pond
- are a veterinarian

. . . you may be able to help prevent a health threat to people and animals from toxic blue-green algae blooms.

In their toxic form, blue-green algae can kill pets, waterfowl, and other animals.

They can also cause serious illness in humans.

You can help by:

- Learning how to identify and avoid contact with a bloom.
- Reporting algae blooms to your local health department.
- Decreasing “nutrient loading” in lakes and streams.

What Is A Blue-Green Algae Bloom?

Blue-green algae, or cyanobacteria, reproduce rapidly in fresh water when the amount of sunlight, temperature and nutrients are adequate. Within a few days a “clear” lake, pond or ditch can become cloudy with algae growth. This is called a bloom. Blue-green blooms usually float to the surface and can be several inches thick near the shoreline.

A blue-green algae bloom:

- Often looks like green paint floating on the water.
- Is made up of extremely small organisms that are hard to pick up or hold.
- Can be bright green, or bluish, brownish or reddish green.
- Is most common in the summer and fall but can occur anytime.

Although blue-green blooms can create nuisance conditions and undesirable water quality, most blue-green blooms are not toxic.

What Can I Do About It?

Algae blooms are likely to occur during sunny, calm weather when high concentrations of nutrients are present in the water. People can have a big effect on the amount of nutrients in a lake. Two important nutrients algae require are phosphorous and nitrogen. These are found in animal and human waste (sewage) and in fertilizers. Excessive amounts of nitrogen and phosphorus may lead to “nutrient loading” and eventually to an algae bloom.

To help decrease nutrient loading:

1. Maintain or restore native plants around lake shorelines and streams that feed the lake. Native wetland plants help filter water and don’t require pesticides or fertilizers for maintenance.
2. Be extremely cautious with lawn and plant fertilizers and pesticides. Don’t over-water, overfertilize, or use more than the recommended amount of pesticides.
3. Improperly-operating or damaged septic systems are a major cause of nutrient loading into nearby water. Proper care and maintenance of your septic system are essential. Have your system pumped and inspected every 3-4 years.
4. Prevent surface water runoff from agricultural and livestock areas. Do not allow livestock to drink or defecate in streams or lakes. Don’t feed waterfowl.
5. Take steps to prevent erosion around construction and logging operations. Erosion can carry nutrient-rich soil into nearby lakes.

What Is A *Toxic* Bloom?

Some blue-green algae produce toxins or poisons. Eventually the toxins break down and are destroyed naturally. Ingesting the algae while they are still poisonous can cause serious illness. Residential drinking water taken from a lake may be affected.

Signs of a toxic bloom may include:

- Large numbers of dead fish, waterfowl or other animals.
- Sudden, unexplained sickness or death of a cat or dog, especially if it has algae on its mouth, legs or feet.
- A skin rash on humans after being in the water.

What If I See A Bloom?

As soon as you notice a bloom or possible signs of poisoning:

- Avoid all contact with water containing the algae.
- Keep pets and livestock away from the water.
- Call the environmental health section of your local health department.

Laboratory tests of water samples can confirm whether or not a bloom is toxic.

Contact With Blue-Green Algae Can Be Poisonous

Get proper medical or veterinary attention right away if you or your pets or livestock have signs of poisoning.

Blue-green algae can produce nerve toxins and liver toxins. Signs of neurotoxin poisoning usually appear within 15–20 minutes after ingestion. In animals, signs include weakness, staggering, difficulty in breathing, convulsions and death. In people, signs may include numbness of the lips, tingling in fingers and toes, and dizziness.

It may be hours or days before signs of liver poisoning appear. Liver toxins can cause abdominal pain, diarrhea and vomiting in humans and death in animals.

Poisoning is more severe the smaller the person or animal and the larger the amount of toxin ingested.